



PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant(s): Nir Shavit et al.

Title: EFFICIENT NON-BLOCKING K-COMPARE-SINGLE-SWAP  
OPERATION

Application No.: 10/670,495

Filed:

September 24, 2003

Examiner: Matthew D. Anderson

Group Art Unit:

2186

Atty. Docket No.: 004-8830

Confirmation No.:

7998

December 28, 2005

Mail Stop Amendment  
COMMISSIONER FOR PATENTS  
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Alexandria, VA 22313-1450**INFORMATION DISCLOSURE STATEMENT**  
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- ☒ Form(s) PTO/SB/08B (2 page(s), with copy of 17 reference(s)).
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Citation of such information shall not be construed as (i) an admission that the information necessarily is, or corresponds to, prior art with respect to the instant invention, (ii) a representation that a search has been made, other than as described herein, or (iii) an admission that the information cited herein is, or is considered to be, material to patentability as defined in § 1.56(b).

For each item of information listed that is not in the English language, the undersigned has provided a concise explanation of the relevance through (i) an English language abstract, (ii) an English language equivalent application, or (iii) if cited in a search report or other action by a foreign patent office in a counterpart foreign application, an English language version of the search report or action that indicates the degree of relevance found by the foreign office.

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- ☐ Pursuant to 1287 OG 163 (October 19, 2004), for those cited pending U.S. patent applications filed (or which entered the national stage under 35 U.S.C. § 371) on or after June 30, 2003 or which are otherwise stored in the USPTO's Image File Wrapper system, copies are not included.

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- ☐ This Information Disclosure Statement is filed within three months of the filing date of a national application other than a continued prosecution application under § 1.53(d) or within three months of entry of the national stage as set forth in § 1.491 in an international application. Therefore, no fee is required.
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Kimberley Elcess  
Kimberley Elcess

28 Dec -05  
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Respectfully submitted,

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PTO/SB/08B (Substitute for form 1449/PTO)		Attorney Docket No.: 004-8830	
		Application No.: 10/670,495	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT		First Named Inventor: Nir Shavit	
		Filing Date: September 24, 2003	
		Group Art Unit: 2186	
		Examiner Name: Matthew D. Anderson	
Sheet 1 of 2		Date Submitted: December 28, 2005	

  

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. <sup>1</sup>	Include name of author (in CAPITAL LETTERS), title of article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
	1	HERLIHY, M.P., et al., "Linearizability: A Correctness Condition For Con-Current Objects," <i>ACM Transactions On Programming Languages and Systems</i> , 12(3):463-492, July 1990.	
	2	HERLIHY, M.P., "Wait-Free Synchronization," <i>ACM Transactions On Programming Languages and Systems</i> , 11(1):124-149, January 1991.	
	3	MASSALIN, H., et al., "A Lock-Free Multiprocessor OS Kernel," Technical Report TR CUCS-005-9, Columbia University, New York, NY, 1991, 21 pages.	
	4	MASSALIN, Henry, "Synthesis: An Efficient Implementation of Fundamental Operating System Services," Dissertation submitted in partial fulfillment of the requirements for the Degree of Doctor of Philosophy in the Graduate School of Arts and Sciences, Columbia University, New York, NY, online, 158 pages, 1992 [retrieved from the Internet on 2001-07-13: URL:ftp://ftp.cs.columbia.edu/reports/reports-1992/cucs-039-92.ps.gz].	
	5	BERSHAD, B. N., "Practical Considerations For Non-Blocking Concurrent Objects," <i>Proceedings 13th IEEE International Conference on Distributed Computing Systems</i> , pp. 264-273. IEEE Computer Society Press, Washington, D.C., 1993.	
	6	HERLIHY, M., "A Methodology For Implementing Highly Concurrent Data Objects," <i>ACM Transactions on Programming Languages and Systems</i> , 15(5):745- 770, November 1993.	
	7	ATTIYA, Hagit, et al., "Are Wait-Free Algorithms Fast?" <i>Journal of the ACM</i> , 41(4):725-763, July 1994.	
	8	LAMARCA, A., "A performance evaluation of lock-free synchronization protocols," <i>Proceedings of the 13th Annual ACM Symposium on Principles of Distributed Computing</i> , pp. 130-140, ACM Press, New York, NY, 1994.	
	9	MICHAEL, Maged M. et al., "Simple, Fast, and Practical Non-Blocking and Blocking Concurrent Queue Algorithms," <i>Proceedings of PODC</i> , pp. 267-275, May 1996.	
	10	ATTIYA, H., et al., "Universal Operations: Unary versus Binary," <i>Proceedings of the 15th Annual ACM Symposium on Principles of Distributed Computing</i> , pp. 223-232, ACM Press, New York, NY, 1996.	
	11	GREENWALD, M. B., et al., "The Synergy Between Non-Blocking Synchronization And Operating System Structure," <i>Proceedings of the 2nd Symposium on Operating Systems Design and Implementation</i> , pp. 123-136, Usenix Association, Berkeley, CA, 1996.	
	12	AFEK, Y., et al., "Disentangling Multi-Object Operations," <i>Proceedings of the 16th Annual ACM Symposium on Principles of Distributed Computing</i> , pp. 111-120, August 1997. Santa Barbara, CA.	
	13	ARORA, N. S., et al., "Thread Scheduling For Multiprogrammed Multiprocessors," <i>Proceedings of the 10th Annual ACM Symposium on Parallel Algorithms and Architectures</i> , pp. 119-129, ACM Press, New York, NY, 1998.	
	14	ATTIYA, Hagit, et al., "Atomic Snapshots In O(n log n) Operations," <i>SIAM Journal on Computing</i> , 27(2):319-340, April 1998.	
	15	GREENWALD, M., "Non-Blocking Synchronization and System Design," PhD thesis, Stanford University Technical Report STAN-CS-TR-99-1624, Palo Alto, CA, August 1999, 241 pages.	

  

Examiner Signature	Date Considered
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\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup>Applicant's unique citation designation number (optional).

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PTO/SB/08B (Substitute for form 1449/PTO)	Attorney Docket No.: 004-8830
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<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>	First Named Inventor: Nir Shavit
(Continuation Sheet)	Filing Date: September 24, 2003
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	16	AGESEN, Ole, et al.: "DCAS-BASED CONCURRENT DEQUES," SPAA 2000. <i>Proceedings of the 12th Annual ACM Symposium on Parallel Algorithms and Architectures</i> , pp. 137 146, ACM Press, New York, NY, ISBN: 1-58113-185-2, 2000.	
	17	DETLEFS, David L., et al., "Even Better DCAS-Based Concurrent Deques," <i>Lecture Notes in Computer Science</i> , vol. 1914, pp. 59-73, Springer-Verlag, Berlin, Germany, ISBN: 3-540-41143-7, 2000.	
Examiner Signature		Date Considered	